

IN THE CLAIMS:

Claims 1-15 (Canceled).

16. (Currently Amended) A device to at least partially seal a leveler door opening of a coke oven chamber during top charging of the coking coal comprising a housing having a first end opening connectable to the leveler door opening, a leveler bar guidable into a second end opening and at least partially through an interior passageway of said housing and at least partially through said leveler door opening, said leveler bar including at least two side segments and at least one cross segment connecting said two side segments, said housing provided with a sealing mechanism to at least partially inhibit a flow of gases ~~from the coke oven through the leveler door opening and into said housing~~ in front of said leveler door opening by creating a no-flow zone in a region in at least closely adjacent to the front of said leveler door opening, said sealing mechanism including a regulatable exhaust fan connected to said housing to expel gas substantially comprising air through an outlet opening in said housing and a flow measuring mechanism at least partially positioned in said housing between the coke oven and said outlet opening, said outlet opening positioned between said first and second end openings of said housing, said flow measuring mechanism at least partially controlling said regulatable exhaust fan to control a volume of gas said expelled gas through said outlet opening.

Claim 17 (Canceled).

18. (Previously Submitted) The device of claim 16, wherein said leveler bar includes at least two of said cross segments and said housing having two sealing plates secured to said housing and extending outwardly from said second end opening of said housing, said sealing plates at least partially sealing gas between at least two of said cross segments of said leveler bar that are spaced outwardly from said second end opening, said two sealing plates positioned substantially parallel to one another and oriented above and below said two cross segments when said leveler bar passes between said two sealing plates.

19. (Previously Submitted) The device of claim 18, wherein said two sealing plates includes a sealing arrangement to at least partially seal said side segments of said leveler bar, said sealing arrangement includes sealing strips and sealing plates provided with press-on means.

20. (Previously Submitted) The device of claim 19, wherein said sealing plates are held in said housing by a partial vacuum, said partial vacuum pressing said sealing plates against said leveler bar.

21. (Previously Submitted) The device of claim 19, wherein said sealing plates are beveled.

22. (Previously Submitted) The device of claim 19, including a plurality of said sealing plates and a plurality of sealing strips being arranged one behind the other in an axial direction, said axial direction defining a thrust direction for said leveler bar.

23. (Previously Submitted) The device of claim 19, wherein said housing at least partially surrounds said sealing plates and said side segments of said leveler bar.

24. (Currently Amended) A device to at least partially seal a leveler door opening of a coke oven chamber during top charging of the coking coal comprising a housing having a first end opening connectable to the leveler door opening so as to form a seal, a leveler bar guided into a second end opening and at least partially through an interior passageway of said housing and at least partially through said leveler door opening, said leveler bar including at least two side segments and at least two cross segments connecting said two side segments, said housing provided with a sealing mechanism to at least partially inhibit a flow of gases ~~from the coke oven through the leveler door opening and into said housing~~ in front of said leveler door opening by creating a no-flow zone in a region in at least closely adjacent to the front of said leveler door opening, said sealing mechanism including at least one movable sealing element to at least partially seal an inner cross section of said leveler bar between said side segments, said at least one movable sealing element includes at least one pivoting seal having a pivotable panel wherein the pivotable panel is movable between at least two of said cross segments of said leveler bar, at least one cell wheel having a plurality of panels

rotatable about an axis wherein at least one of said panels is movable between at least two of said
15 cross segments of said leveler bar, and combinations thereof.

Claims 25 and 26 (Canceled).

27. (Previously Submitted) The device of claim 26, including at least two sealing plates arranged in said housing, said sealing plates secured to said housing and extending outwardly from said second end opening of said housing, said sealing plates at least partially sealing gas between at least two of said cross segments of said leveler bar that are spaced outwardly from said second end opening, said two sealing plates positioned substantially parallel to one another and oriented above and below said two cross segments when said leveler bar passes between said two sealing plates.

Claim 28 (Canceled).

29. (Currently Amended) A method for sealing a leveler door opening of a coke oven chamber during a leveling process including providing a housing about the leveler door opening and guiding a leveler bar at least partially through said housing and said leveler door opening, forming a seal between said leveler door opening and said leveler, the improvement comprising regulating
5 exhaustion of gas substantially comprising air from said housing by measuring the flow of gas through the leveler door opening and controlling the rate of said gas exhaustion from said housing in order that there is effectively no gas flow through said leveler door opening.

30. (Currently Amended) A device to at least partially seal a leveler door opening of a coke oven chamber during top charging of the coking coal comprising a housing having a first end opening at least partially connectable to the leveler door opening and at least partially encircling said the leveler door opening, a leveler bar at least partially moveable into a second end opening of
5 said housing and at least partially through an interior passageway of said housing and guidable at least partially through said leveler door opening, said leveler bar including at least two side segments and at least one cross segment connecting said two side segments, said housing provided with a sealing mechanism to inhibit a flow of gases ~~from the coke oven through the leveler door opening~~
in front of said leveler door opening by creating a no-flow zone in a region in at least closely

10 adjacent to the front of said leveler door opening, said sealing mechanism including a regulatable
exhaust fan connected to said housing to expel gas substantially comprising air through an outlet
opening in said housing and a flow measuring mechanism at least partially positioned in said
housing between the coke oven and said outlet opening, said outlet opening positioned between said
first and second end openings of said housing, said flow measuring mechanism measuring gas flow
15 through said leveler door opening, said flow measuring mechanism at least partially controlling said
regulatable exhaust fan to control a flowrate a of said expelled gas through said outlet opening so
as to substantially reduce the flow of gas through said leveler door opening.

Claims 31 and 32 (Canceled).

33. (Currently Amended) The device as defined in 30, wherein said regulatable exhaust fan at least partially directs said expelled gas into an adjacent coke oven chamber.

34. (Previously Presented) The device as defined in claim 30, wherein said leveler bar includes at least two of said cross segments and said housing having two sealing plates secured to said housing and extending outwardly from said second end opening of said housing, said sealing plates at least partially sealing gas between at least two of said cross segments of said leveler bar that
5 are spaced outwardly from said second end opening, said two sealing plates positioned substantially parallel to one another and oriented above and below said two cross segments when said leveler bar passes between said two sealing plates.

35. (Previously Presented) The device as defined in claim 33, wherein said leveler bar includes at least two of said cross segments and said housing having two sealing plates secured to said housing and extending outwardly from said second end opening of said housing, said sealing plates at least partially sealing gas between at least two of said cross segments of said leveler bar that
5 are spaced outwardly from said second end opening, said two sealing plates positioned substantially parallel to one another and oriented above and below said two cross segments when said leveler bar passes between said two sealing plates.

36. (Previously Presented) The device as defined in claim 30, including a seal arrangement to at least partially form a leveler seal between an outer surface of said leveler bar and an interior surface of said housing, said leveler seal including sealing strips, sealing plates and combinations thereof.

37. (Previously Presented) The device as defined in claim 35, including a seal arrangement to at least partially form a leveler seal between an outer surface of said leveler bar and an interior surface of said housing, said leveler seal including sealing strips, sealing plates and combinations thereof.

38. (Previously Presented) The device as defined in claim 36, wherein said leveler seal is provided with press-on means.

39. (Previously Presented) The device as defined in claim 37, wherein said leveler seal is provided with press-on means.

40. (Previously Presented) The device as defined in claim 36, wherein said sealing plates are at least partially held in said housing by a partial vacuum, said partial vacuum at least partially causing said sealing plates to press against said leveler bar.

41. (Previously Presented) The device as defined in claim 39, wherein said sealing plates are at least partially held in said housing by a partial vacuum, said partial vacuum at least partially causing said sealing plates to press against said leveler bar.

42. (Previously Presented) The device as defined in claim 36, wherein said sealing plates are at least partially beveled.

43. (Previously Presented) The device as defined in claim 41, wherein said sealing plates are at least partially beveled.

44. (Previously Presented) The device as defined in claim 36, wherein a plurality of said sealing plates and a plurality of sealing strips are arranged one behind the other in an axial direction, said axial direction defining a thrust direction for said leveler bar.

45. (Previously Presented) The device as defined in claim 41, wherein a plurality of said sealing plates and a plurality of sealing strips are arranged one behind the other in an axial direction, said axial direction defining a thrust direction for said leveler bar.

46. (Currently Amended) A device to at least partially seal a leveler door opening of a coke oven chamber during top charging of the coking coal, comprising a housing having a first end opening at least partially connectable to the leveler door opening, a leveler bar at least partially moveable into a second end opening of said housing and at least partially through an interior passageway of said housing and guidable at least partially through said leveler door opening, said leveler bar including at least two side segments and at least one cross segment connecting said two side segments, said housing provided with a sealing mechanism to inhibit a flow of gases ~~from the coke oven through the leveler door opening~~ in front of said leveler door opening by creating a no-flow zone in a region in at least closely adjacent to the front of said leveler door opening, said sealing mechanism including at least one movable sealing element to at least partially seal an inner cross section of said leveler bar between said side segments, said at least one movable sealing element includes at least one pivoting seal, at least one cell wheel, at least one movable roller and combinations thereof.

Claim 47 (Canceled).

48. (Previously Presented) The device as defined in claim 46, including a plurality of moveable sealing elements.

Claim 49 (Canceled).

50. (Previously Presented) The device as defined in claim 46, wherein said at least one pivoting seal is hingably connected to said housing, said at least one rotary lock having a pivotable

panel wherein the pivotable panel is movable between at least two of said cross segments of said leveler bar.

51. (Previously Presented) The device as defined in claim 48, wherein said at least one pivoting seal is hingably connected to said housing, said at least one rotary lock having a pivotable panel wherein the pivotable panel is movable between at least two of said cross segments of said leveler bar.

52. (Previously Presented) The device as defined in claim 46, wherein said at least one cell wheel having a plurality of panels rotatable about an axis wherein at least one of said panels is movable between at least two of said cross segments of said leveler bar.

Claim 53 (Canceled).

54. (Previously Presented) The device as defined in claim 46, wherein said leveler bar includes at least two of said cross segments and said housing having two sealing plates secured to said housing and extending outwardly from said second end opening of said housing, said sealing plates at least partially sealing gas between at least two of said cross segments of said leveler bar that are spaced outwardly from said second end opening, said two sealing plates positioned substantially parallel to one another and oriented above and below said two cross segments when said leveler bar passes between said two sealing plates.

55. (Previously Presented) The device as defined in claim 46, including a seal arrangement to at least partially form a leveler seal between an outer surface of said leveler bar and an interior surface of said housing, said leveler seal including sealing strips, sealing plates and combinations thereof.

56. (Previously Presented) The device as defined in claim 54, including a seal arrangement to at least partially form a leveler seal between an outer surface of said leveler bar and an interior surface of said housing, said leveler seal including sealing strips, sealing plates and combinations thereof.

57. (Previously Presented) The device as defined in claim 55, wherein said leveler seal is provided with press-on means.

58. (Previously Presented) The device as defined in claim 56, wherein said leveler seal is provided with press-on means.

59. (Previously Presented) The device as defined in claim 55, wherein said sealing plates are at least partially held in said housing by a partial vacuum, said partial vacuum at least partially causing said sealing plates to press against said leveler bar.

60. (Previously Presented) The device as defined in claim 58, wherein said sealing plates are at least partially held in said housing by a partial vacuum, said partial vacuum at least partially causing said sealing plates to press against said leveler bar.

61. (Previously Presented) The device as defined in claim 55, wherein said sealing plates are at least partially beveled.

62. (Previously Presented) The device as defined in claim 60, wherein said sealing plates are at least partially beveled.

63. (Previously Presented) The device as defined in claim 55, wherein a plurality of said sealing plates and a plurality of sealing strips are arranged one behind the other in an axial direction, said axial direction defining a thrust direction for said leveler bar.

64. (Previously Presented) The device as defined in claim 62, wherein a plurality of said sealing plates and a plurality of sealing strips are arranged one behind the other in an axial direction, said axial direction defining a thrust direction for said leveler bar.

65. (Currently Amended) A method for at least partially sealing a leveler door opening of a coke oven chamber during the leveling process comprising:

a. providing a housing having a first end opening at least partially connectable to the leveler door opening;

5 b. providing a leveler bar;

c. moving and at least partially guiding said leveler bar at least partially through said housing and said leveler door;

d. monitoring gas flow through said leveler door opening; and,

10 e. at least partially regulating exhaustion of gas substantially comprising air from said housing by measuring a flow of gas through the leveler door opening and controlling a rate of said gas exhaustion from said housing in order that there is effectively no gas flow through said leveler door opening while said leveler bar moves through said leveler door opening.

Claim 66 (Canceled).

67. (Previously Presented) The method as defined in claim 65, wherein said leveler bar includes at least two side segments and at least one cross segment connecting said two side segments.

Claims 68-70 (Canceled).

71. (Currently Amended) The method as defined in 65, including the step of at least partially directing said exhausted gas ~~fan~~ into an adjacent coke oven chamber.

72. (Previously Presented) The method as defined in claim 66, including a sealing arrangement to inhibit gas flow between said housing and said leveler bar, said seal arrangement includes at least two sealing plates, at least one sealing strip, and combinations thereof.

73. (Previously Presented) The method as defined in claim 65, wherein said leveler bar includes at least two of said cross segments and said at least two sealing plates being secured to said housing and extending outwardly from a second end opening of said housing, said sealing plates at least partially sealing gas between at least two of said cross segments of said leveler bar that are

spaced outwardly from said second end opening, said two sealing plates positioned substantially parallel to one another and oriented above and below said two cross segments when said leveler bar passes between said two sealing plates.